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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,661	12/14/2001	Man Hay Pong	9661-0024-999	9580

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EXAMINER

A, MINH D

ART UNIT PAPER NUMBER

2821

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,661

Applicant(s)

PONG ET AL.

Examiner

Minh D A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-6 and 10 is/are allowed.
- 6) ☒ Claim(s) 1,3, 7-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being unpatentable by Long et al (US 6,025,697).

Regarding claim 1, Long discloses a process for charging a battery and battery charger to achieve the process comprising: an inductor (4) coupled in series with a first light emitting diode (6); a second light emitting diode (3) coupled in parallel to the inductor (4) and the first light emitting diode (6) such that the second light emitting diode (3) is reverse biased when a power source (Vb) drives a current through the inductor (4) and the first light emitting diode (6) and a switch controlling (5) the connection of the inductor (4) and the first light emitting diode (6) to the power source (Vb). See figure 1, col.3, lines 20-67 to col.4, lines 1-67.

3. Claim 7 is rejected under 35 U.S.C. 102(b) as being unpatentable by Goodman(US 6,333,861).

Regarding claim 7, Goodman discloses low loss snubber and transformer reset circuit for forward converters comprising: a switching forward power converter with a transformer (102)', a secondary winding (Ns) coupled to the transformer (102) having at least two terminals (+ and – terminals)', a first light emitting diode (103) having a first

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end and a second end, the first end of the first light emitting diode (103) coupled to a first terminal of the secondary winding (+) and the second end of the first light emitting diode (103) coupled to a first end of an inductor (106) and a first end of a second light emitting diode (103), wherein, a second end of the second light emitting diode (Ds2) being coupled to a second terminal of the secondary winding (- terminal)', and a third light emitting diode (Ds1) coupled in parallel with the series combination of the second light emitting diode (Ds2) and the inductor (106). See figure 2, col.3, lines 20-67 to col.6, lines 1-60.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 8 is rejected under 35 U.S.C. 102(e) as being unpatentable by Kato (US 6,396,714).

Regarding claim 8, Kato discloses an apparatus to provide power to drive a plurality of light emitting diodes (18, 19, 28 and 29) comprising 'a switching flyback power converter (23-26) with a transformer (17); a plurality of secondary windings coupled to the transformer', and at least one light emitting diode (18, 19 and 28 and 29) coupled to each of two of the plurality of secondary windings. See figure 5, col.7, lines 13-46.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Long (US 6,025,697).

Regarding claim 3, Long essentially discloses the claimed invention but does not explicitly disclose that a third light emitting diode coupled, in series to the first light emitting diode, to a first terminal and a second terminal of the power source. It would have been an obvious matter of design choice to employ Long in any desired interest environment such as third diode in order to maximize the usage of his invention, since applicant does not disclose that, this limitations can solve any stated problem and for

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any particular purpose. Therefore, it appears that the invention would not provide any improvement but merely apply the invention in different presentation.

Allowable Subject Matter

8. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest that, a third light emitting diode coupled, in parallel to the first light emitting diode, to a first terminal and a second terminal of the power source in dependent claim 2.

The prior art does not teach that, a bridge rectifier for converting an alternating current to a direct current; and means to operate the fly-back converter to operate in discontinuous mode with current delivered by an alternating current source with phase angle following a corresponding alternating voltage in dependent claim 9.

9. Claims 4-6 and 10 are allowable.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach that, the at least one second light emitting diode having a forward voltage higher than input voltage across the first and second terminals, wherein furthermore, the second light emitting diode is connected in parallel to the switch and the first light emitting diode, wherein furthermore, the second light emitting

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diode is coupled in series with the inductor and the power source in combination with all limitations recited in independent claim 4.

The prior art does not teach that, an inductor coupled to the cathodes of the first and the second light emitting diodes, the inductor further coupled to a second terminal of the first secondary winding and a second terminal of the second secondary winding via a third light emitting diode in combination with all limitations recited in independent claim10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Atchinson et al (US 6,371,637) and Allen (US 6,072,280) are cited to show a LED light.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834). The fax phone numbers

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for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.



WILSON LEE
PRIMARY EXAMINER

Examiner

Minh A

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10/05/04